

## CLAIMS

1. A hydrating case having a containment recess for containing therein a moisture-containing contact lens and used for bringing the moisture-containing contact lens in a dry state into contact with a hydrating liquid within the containment recess in order to absorb water and swell, the hydrating case being characterized in that
  - an area of a concave inside face of the containment recess on which the moisture-containing contact lens rests is formed as a concave bowed face having a curvature generally equivalent to that of a front surface of the moisture-containing contact lens, and a depression that opens out onto the concave bowed face is formed in order to create a gap between the moisture-containing contact lens and the containment recess so that when the hydrating liquid flows down along the concave inside face, the hydrating liquid enters the gap.
2. A hydrating case according to claim 1, wherein the depression is formed in such a way that, when the moisture-containing contact lens is placed on the concave bowed face of the containment recess, the gap formed between the moisture-containing contact lens and the containment recess has a opening that opens to an outer peripheral side of the moisture-containing contact lens, and extends continuously diametrically inward from the opening.
- 25 3. A hydrating case according to claim 1 or 2, wherein the depression is formed by at least one groove.
4. A hydrating case according to claim 3, wherein at least one of the grooves is of a pattern extending generally in the circumferential direction 30 of the concave bowed face.

5. A hydrating case according to claim 3 or 4, wherein at least one of the grooves has a pattern extending in the generally diametrical direction of the concave bowed face.

5

6. A hydrating case according to any one of claims 1-5, wherein a groove depth dimension is 0.05 mm or more where a groove width dimension is 1 mm or less, whereas the depth dimension is less than 0.05 mm where the groove width dimension is 3 mm or more.

10

7. A hydrating case according to any one of claims 1-6, wherein a ratio of an area: Ab occupied by the depression to a total area: Aa of the concave bowed face on which the moisture-containing contact lens rests, is such that  $0.2 \leq Ab/Aa \leq 0.8$ .

15

8. A hydrating case according to any one of claims 1-7, wherein a center support portion having no grooves is formed in a center portion of the concave bowed face so that a center portion of the moisture-containing contact lens is superimposed over an entire face of the center support portion.

20

9. A hydrating case according to any one of claims 1-7, wherein a center depression is formed in a center portion of the containment recess so that a lens center is supported floating above the containment recess by the center depression.

25

10. A hydrating case according to any one of claims 1-9, wherein both the concave bowed face and a bottom face of the depression have smooth, generally mirrored surfaces.

30

11. A hydrating case according to any one of claims 1-10, wherein a mating portion is formed in a rim of a mouth of the containment recess, and a cover is detachably attached by being mated with the mating portion.
- 5    12. A hydrating case according to claim 11, wherein the cover has a tube through-hole formed therein, and a supply tube for supplying the hydrating liquid to the containment recess is inserted through the tube through-hole so that with the containment recess covered by the cover the hydrating liquid is supplied to the containment recess through the supply tube.
- 10    13. A hydrating case according to claim 11 or 12, wherein the mouth of the containment recess is provided with a liquid tight closure by the cover so as to constitute a distribution case in which the moisture-containing contact lens is sealed within the containment recess in a state of being
- 15    immersed in a distribution storage liquid.
14. A hydrating device employing a hydrating case defined in any one of claims 1-13, for use to allow the moisture-containing contact lens in the dry state within the containment recess of the hydrating case to absorb
- 20    water and swell, the hydrating device being characterized by comprising:  
            a flow tube set bordering a mouth of the containment recess in the hydrating case; and  
            a first injection port and a second injection port formed in the flow tube for supplying the hydrating liquid to the containment recess, the first
- 25    injection port opening towards the concave inside face on a mouth side from the concave bowed face in the containment recess of the hydrating case, and the second injection port opening towards a back surface of the moisture-containing contact lens resting on the concave bowed face of the lens,
- 30    wherein a supply of the hydrating liquid through the first injection

port and a supply of the hydrating liquid through the second injection port are independently controllable.

15. A hydrating device employing a hydrating case defined in any one of  
5 claims 1-13, for use to allow the moisture-containing contact lens in the dry state within the containment recess of the hydrating case to absorb water and swell, the hydrating device being characterized by comprising:

a flow tube set bordering the mouth of the containment recess in the hydrating case; and

10 an injection port formed in the flow tube for supplying the hydrating liquid to the containment recess, the flow tube being inclined with respect to the hydrating case whereby an opening direction of the injection port is variable with respect to the containment recess, and being selectively positionable at either a first opening location at which the injection port  
15 opens towards the concave inside face on a mouth side from the concave bowed face in the containment recess of the hydrating case, and a second opening location at which the injection port opens towards a back surface of the moisture-containing contact lens resting on the concave bowed face of the lens.

20

16. A hydrating device according to claim 14 or 15, wherein a drain port opening into the containment recess is formed in the flow tube, the hydrating liquid supplied to the containment recess being sucked out through the drain port in order to drain the liquid from the containment  
25 recess.

17. A moisture-containing contact lens hydrating method employing a hydrating case defined in any one of claims 1-13, for use to allow the moisture-containing contact lens in the dry state within the containment  
30 recess of the hydrating case to absorb water and swell, the hydrating

method being characterized by comprising:

a first injection step wherein the moisture-containing contact lens in the dry state is placed in the containment recess of the hydrating case, and with the front surface of the moisture-containing contact lens resting supported on the concave bowed face, the hydrating liquid is supplied along the concave inside face on the mouth side from the concave bowed face in the containment recess, whereby the hydrating liquid is made to enter the gap formed between the moisture-containing contact lens and the containment recess by means of the depression; and

10 a second injection step wherein after the first injection step, the hydrating liquid is supplied towards the back surface of the moisture-containing contact lens contained within the containment recess, whereby the moisture-containing contact lens is immersed in the hydrating liquid within the containment recess.

15

18. A moisture-containing contact lens hydrating method according to claim 17, wherein a hydrating liquid feed during the first injection step is 2 mL or less.

20

19. A moisture-containing contact lens hydrating method according to claim 17 or 18, wherein after the second injection step, a flow step in which more hydrating liquid is supplied continuously to the containment recess while draining the excess hydrating liquid from the containment recess at the same time is performed.

25

20. A moisture-containing contact lens hydrating method according to claim 19, wherein in the flow step, the flow rate produced through the containment recess by means of supplying and draining the hydrating liquid is varied in stepwise fashion.

30